# D.P.U. 93-90

Application of Boston Edison Company, pursuant to G.L. c. 164 App., §§ 2-1 through 2-10 and 220 C.M.R. §§ 7.0@t seq., for approval by the Department of Public Utilities of the Company's proposed operating budget and applicable monthly surcharge for the Residential Energy Conservation Service program for fiscal year 1994 (July 1, 1993 through June 30, 1994).

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Petitioner

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FOR: DIVISION OF ENERGY RESOURCES Intervenor

### I. INTRODUCTION

On April 30, 1993, pursuant to G.L. c. 164 App., §§ 2-1 through 2-10 and 220 C.M.R. §§ 7.00et seq., Boston Edison Company ("BECO" or "Company") filed with the Department of Public Utilities ("Department") a petition for approval by the Department of the Company's proposed operating budget of \$1,814,712, with reconciliations of under- and overcollections from prior fiscal years resulting in a net amount to be collected of \$1,709,007, and applicable monthly surcharge of \$0.21 for the residential energy conservation service ("ECS") program for the fiscal year July 1, 1993 through June 30, 1994 ("FY 1994"). The petition was docketed as D.P.U. 93-90.

Pursuant to notice duly issued, a hearing was held at the offices of the Department on June 10, 1993. The Department granted the petition for leave to intervene filed by the Division of Energy Resources ("DOER"). No other petitions for leave to intervene were filed.

In support of its petition, the Company sponsored the testimony of one witness: Agnes E. Hagopian, energy conservation services program manager at BECo. DOER sponsored the testimony of Bruce Ledgerwood, residential energy planner. The Company submitted two exhibits and responded to eleven record requests, the DOER submitted one exhibit, and the Department submitted nine exhibits, all of which were part of the evidentiary record.

### II. STATUTORY HISTORY

In response to the mandates of the National Energy

Conservation Policy Act of 1978, the Commonwealth of
Massachusetts enacted St. 1980, c. 465, codified as G.L. c. 164
App., §§ 2-1 through 2-10, to establish the ECS program and to
require all electric and gas utilities in Massachusetts to offer
on site energy conservation and renewable energy resource
services to their customers, thereby encouraging citizens to take
steps immediately to improve the energy efficiency of all
residential buildings in Massachusetts. G.L. c. 164 App., § 2-2.
The statute requires each utility to provide certain energy
conservation services through individual or joint efforts in
conformance with an overall state plant. Id.

Pursuant to the statute, DOER must adopt a state plan and promulgate regulations necessary to implement that plan. Id.,

§ 2-3(a). Specifically, DOER is responsible for:

(1) establishing residential conservation and energy goals

("goals"); (2) establishing ECS program guidelines;

(3) monitoring the implementation of the program requirements;

and (4) overseeing the implementation of the state plan by

approving a utility implementation plan ("UIP"). Each utility

Prior to 1989, DOER required utilities to offer a commercial energy conservation service program for businesses and other commercial customers; however, DOER eliminated that requirement when the Department required the implementation of demand-side management ("DSM") programs that are geared toward commercial customers. Commonwealth Gas Company D.P.U. 92-116, at 3 (1992).

must submit a UIP to DOER annually. After a utility receives annual approval of its UIP from DOER, it must submit its proposed ECS program operating budget and proposed ECS surcharge for the upcoming fiscal year to the Department for review. G.L. c. 164 App., § 2-7(b).

#### III. COMPANY PROPOSAL

### A. Establishment of ECS Program Goals

The proposed budget for each fiscal year is based on DOER ECS goals, detailed in the UIP, that specify levels of effort required for each individual utility or group of utilities (Exh. BE-1, § V 1). In conference with the utilities, DOER establishes specific goals for the delivery of audits and "equivalent services" which include a variety of follow-up services for customers who have received an audit. The equivalent services are designed to assist customers in pursuing conservation measures recommended as a result of the audit, to provide educational and informational services, and to establish various pilot programs.

For FY 1994, DOER enumerated the "equivalent services" designed to assist customers in pursuing conservation measures recommended pursuant to an audit (Exh. DOER-1, Att. I). These

The ECS program consists of a one-to-four unit ("1-4") residential program and a multifamily building ("MFB") program.

include: (1) contractor arranging services ("CAS");(2) postinstallation inspections in homes where conservation measures
have been installed following an ECS audit;(3) demonstration
material installations ("DMI");(4) bulk purchasing services;
(5) major work order specification development services; and

CAS provides technical assistance and guidance to the customer throughout the course of securing and enacting a contract for the installation of energy conservation measures (Exh. DOER-1, Att. I at 14). CAS includes assisting the customer in selecting a contractorid.).

A post-installation inspection is an on-site quality control inspection by a DOER-approved inspector of the installation of an energy conservation measure to determine whether the measure will perform properly to save energy (Exh. DOER-1, Att. I at 14).

DMI is the installation by the auditor at the time of the site visit of low-cost energy conservation materials, not to exceed \$30 in value (Exh. DOER-1, Att. I at 10). Materials are installed for the purpose of demonstrating to the customer the proper application and installation of the material (id.). Materials are chosen for installation and demonstration at the discretion of the auditor based on the priority of fuel-blind, specific energy conservation needs of the dwelling as determined during the auditid.).

Bulk purchasing provides access to bulk bidding or group purchasing services for customers seeking to purchase energy conservation materials (Exh. DOER-1, Att. I at 13). Materials available through this service must include all materials, same type and quality, as demonstrated in the DMI service (id.).

A major work order/specification is the preparation of a job specification sheet for a major energy conservation measure(s) recommended during the audit from which: (1) a customer may install the measure(s) personally; (2) a customer may contract for the installation of the measure by a contractor; or (3) a contractor may work to provide the customer with a complete and accurate bid for installation of an energy conservation measure under the utility's CAS program (see definition of CAS above) (Exh. DOER-1, Att. I at 12).

(6) low-cost work order/specification development services (Exh. DOER-1, Att. I). A seventh, optional service is the ECS/Weatherization Assistance Program ("WAP") coordination service (id.).

Equivalent services goals are determined as a percentage of audit recipients who should participate in the follow-up of equivalent services. The percentages are the minimum goal for service delivery under all utility and group ECS programs (Exh. DOER-1). As in prior fiscal years, ECS audit and equivalent services goals do not represent a ceiling to customer participation. See Mass-Save, Inc., D.P.U. 91-28, at 4-5 (1991). Rather, DOER encourages ECS program providers to exceed goals in a cost-efficient manner id.).

#### B. Audit Goals

BECO participated with DOER in goal-setting for FY 1994 and stated that its UIP for FY 1994 was approved by DOER (Exhs. BE-1, § V.1; BE-2, at 2; DOER-1, at 15-16). For FY 1994, BECO has set an ECS goal of 9,000 audits, and an equivalent services goal of 15,705 in the 1-4 unit program (Exh. BE-1, at V-3.2). BECO also has set a goal of 450 audits under WAP, an MFB goal of 375

A low-cost measure work order/specification is the preparation of a job specification sheet for purchase of materials for low-cost energy conservation measures such as infiltration, domestic hot water, and lighting measures (Exh. DOER-1, Att. 1, at 13).

This is an increase over the FY 1993 goal of 8,200 audits.

audits, and a tenant services goal of 500 audits  $\underline{i}$ (a). The Company's proposed FY 1994 budget is approximately five percent higher than its FY 1993 budget.

DOER's witness testified that the Company's FY 1994 goals were established by (1) reviewing ECS production over the previous three years and (2) considering the degree of planned linkage between ECS and utility DSM management programs and the impact of those programs on each component within the ECS program (Exh. DOER-1, at 4-5). In the case of MFB, DOER accepted the Company's proposal to reduce its FY 1994 target to 375 audits due to BECo's contention that the number of buildings per audit was declining (id., at 9-10). 11

DOER stated that as part of its ongoing ECS program administration and FY 1993 goal setting procedures, DOER gathered CAS program information from the five ECS-covered utility programs based on the first six months of FY 1993 (Exh. DOER-1, at 6). DOER explained that data was collected and analyzed for program costs, participation rates, and customer investments per installed measure (id.). To evaluate the cost effectiveness of CAS, DOER compared the total program costs to the total estimated savings (id.). To estimate total savings achieved through CAS, DOER calculated the cumulative sum of the estimated lifetime

This is a reduction from the FY 1993 goal of 440 audits.

Typically, an audit in the ECS MFB Program will study energy consumption in several buildings of similar or identical construction in a complex.

savings of each measure installed under CAS $\underline{i}(a)$ . DOER stated that ECS providers estimated annual savings per measure based on ECS audit savings projections, and that lifetime savings for each individual measure were then estimated by multiplying these first year savings by the individual measure lifetime averages based on technical assessments reported in three utility DSM cases $\underline{i}(a)$  at 6-7).

DOER stated that its evaluation of CAS did not examine the degradation of measures over their lifetime, interactivity of measures, the effects of free riders, nor did the evaluation consider the benefit of externalities or other non-energy benefits that may have been realized through the workid. at 7). Furthermore, in its testimony, DOER stated that its analysis of CAS had not discounted the value of future energy savings to reflect the time-value of money (Tr. at 47). DOER contends that if all of these factors were taken into account, there would still be more than a one to one ratio of dollars saved to dollars spent (id.).

### IV. STANDARD OF REVIEW

In order for the Department to review a utility's proposed ECS program budget, the utility's budget filing must conform to Department regulations set out at 220 C.M.R. §§ 7.0@t seq. It also must meet the filing requirements enumerated iMass-Save, Inc., D.P.U. 85-189, at 15-16 (1985).

After determining that a utility's ECS program budget filing is complete, the Department must review the proposed budget for

reasonableness and consistency with the state plan adopted by DOER and approve the budget in whole or with modification. G.L. c. 164 App., § 2-7(b). The Department has stated that, in general, expenses for the ECS program require the same level of justification as other utility operating expenses. Mass-Save, Inc., D.P.U. 1531, at 11-12 (1983). These expenses must be shown to be prudently incurred and reasonable. Id. The decision—making process in the selection of contractors, the choice of marketing techniques and expenses, and the allowance made for administrative and other operating costs should be documented to demonstrate that the utility has chosen a reasonable means of meeting the program regulations at the lowest cost. Id. The utility should show that a reasonable range of options has been considered before choosing one particular contractor or plan. Id.

After completing its review of a utility's proposed ECS expenditures for reasonableness, the Department also must review the utility's proposed ECS surcharge by which the utility is entitled to recover the full cost of the ECS program from its customers. As part of this review, the Department must examine any differences between the amounts collected and the amounts expended on the ECS program by the utility during the prior fiscal year and deduct any expenses that it finds to have been unreasonable. G.L. c. 164 App., § 2-7(f). After deducting any unreasonable expenses, the Department must ensure that the net difference is reflected accurately as an adjustment to the

utility's proposed ECS surcharge for the upcoming fiscal year.

Id.

### V. ANALYSIS AND FINDINGS

### A. FY 1992 Expenses

In <u>Boston Edison Company</u> D.P.U. 91-87 (1991), the Department approved a net operating budget of \$1,812,743 for BECo's FY 1992 ECS program. The budget approval was based on a 1-4 Unit Program goal of 8,200 audits, an equivalent services goal of 14,637, and an MFB goal of 440 audits. BECo reports that its actual twelve-month expenditures for FY 1992 were \$1,635,406 (Exh. BE-1, § IV, at 2.1). The Company provided a justification for all budget line-items which varied by more than \$2,000 from the budget approved in D.P.U. 91-87 (Exh. BE-1, § IV, at 1.17).

Based on our review of the record in this proceeding, the Department finds the Company's twelve-month expenditures for FY 1992 to be reasonable, and therefore recoverable from its ratepayers.

### B. FY 1993 Expenses

In <u>Boston Edison Company</u> D.P.U. 92-113 (1992), the Department approved a net operating budget of \$1,725,227 for BECo's FY 1993 ECS program. The budget approval was based on a 1-4 Unit Program goal of 8,200 audits, an equivalent services goal of 15,352, and an MFB goal of 440 audits (Exh. BE-1, § II, at 1).

Based on nine months of actual operating expenses of \$1,216,718 and three months of estimated operating expenses of

\$375,355, BECo projects total expenditure of \$1,592,073 in FY 1993 (id., § III, at 1.2). The Company further projects that by the end of FY 1993, it will have completed 9,892 audits in the 1-4 Unit Program, provided 19,335 equivalent services, and performed 543 audits in the MFB id., § II, at 1). Thus, the Company projects that in FY 1993 it will exceed its performance goals while underspending its budget.

The Company has provided a complete explanation of its expenditures for the first nine months of FY 1993. The Department finds the \$1,216,718 of expenditures in these months to be reasonable, and therefore recoverable from ratepayers. The Department will review the Company's actual expenditures for the final three months of FY 1993 in the next annual budget review.

#### C. Proposed Budget for FY 1994

BECO has provided documentation showing that DOER has approved all goals and components of the Company's 1-4 Unit and MFB UIPs (Exh. BE-1, § V). Furthermore, DOER indicated that the budget is consistent with BECo's approved UIP and program goals for FY 1994 (Exh. DOER-1, at 16). The Department notes that the Company's filing adequately identifies a cost element for each goal and component of its UIP. In addition, the Company has provided an explanation of the budget expenditures, all of which were listed by line-item account (Exh. BE-1, § III).

The record suggests that the line-item budget expenditures proposed by the Company to meet its FY 1994 goals are reasonable. As discussed below, however, there are two budget areas that

require additional comment.

# 1. FY 1994 Marketing Budget

Although the Company's goal for the 1-4 Unit Program has increased by approximately ten percent over its FY 1993 goal, the Company has submitted a marketing budget for FY 1994 that is nearly three times its projected actual marketing expenses for FY 1993 (Exh. BE-1, § V, at 6.C.1). For the MFB program, the Company's FY 1994 goal has dropped substantially, yet the proposed marketing budget for this program component in FY 1994 is nearly twice the amount the Company expects to actually spend in FY 1993 (id., at 6.C.3).

In response to questioning on this subject, the Company's witness, Ms. Hagopian, stated that although BECo typically underspends its ECS marketing budget, customer behavior is unpredictable, and that the Company would prefer to have sufficient funds available to increase its marketing activities, should the desired level of participation not materialize (Tr. at 9-13). DOER supported the Company's proposed marketing budget, citing the need to maintain a relatively constant level of audit requests in the final three months of the fiscal year, when participation typically tends to fall off (Tr. at 56-57).

The Department recognizes that numerous factors beyond the

Ms. Hagopian stated that many factors may influence customer participation, including competition for customers from utility-sponsored DSM programs, the weather, economic conditions, oil prices, as well as events such as the Gulf war (Tr. at 11-12).

Company's control will affect interest and participation in its ECS program. However, the Department finds that the Company has not presented evidence regarding such factors sufficient to support the degree of disparity between its FY 1994 marketing budget and actual FY 1993 marketing expenditures. Furthermore, the record shows that the FY 1994 marketing budget contains line items for expenditures on activities which are of extremely questionable value in the achievement of the stated purposes of the ECS program. For example, the FY 1994 marketing budget includes a total of \$11,000 for a line-item entitled "Local Initiative" (Exh. BE-1, § IV, at 3.3). This proposed amount remains the same as that included in the FY 1993 budget, despite the fact that in FY 1993, only \$337 actually has been spent (Exh. BE-1, § V, at 6.C.1-6.C.3; RR-DPU-1) $^3$ . Another example is the line-item entitled "Incentive Items." The Company is requesting a total of \$8,000 in FY 1994 to provide customers with items such as refrigerator magnets and pads of paper intended to draw them into a conversation about ECS (Exh. DPU-5). amount is an increase over the FY 1993 Incentive Items budget of \$6,000, despite the fact that the Company spent only \$3,500 in this area in FY 1993 (Exh. BE-1, § V, at 6.C.1-6.C.3). Department cannot find as reasonable expenditures that are so tangential to the purposes of the ECS program, particularly at a

The Company's response to RR-DPU-1 indicates that this money was spent to provide refreshments to BECo customers to encourage them to attend a meeting regarding ECS (RR-DPU-1).

time when the Company has successfully overachieved its participation goals while significantly underspending its marketing budget.

The Department notes that reduction or elimination of these budget line-items would not alter the Company's ECS surcharge. Nevertheless, the Department finds that the amounts proposed in the FY 1994 budgets for local initiative and incentive items are not reasonable. Accordingly, the Department approves expenditures of no more than \$3,000 for local initiative and \$3,500 for incentive items for FY 1994.

The Department directs the Company to make every effort to improve the efficiency of its marketing effort and to eliminate any expenditures that are not essential to fulfilling the goals set by DOER. For the Company's FY 1995 ECS budget, the Department directs the Company to provide a thorough description and rationale of all FY 1994 marketing expenditures. If the Company decides to make any expenditures for local initiative or incentive items, it should provide in its FY 1995 ECS budget filing an explicit showing of the prudence of such expenditures, including a description of how such expenditures resulted in requests for ECS services, and why such requests could not have been generated more cost-effectively through another marketing method, such as billing inserts.

### 2. Funding for MFB Auditor

During cross-examination, DOER's witness, Mr. Ledgerwood, indicated that the Company has included monies in its proposed

FY 1994 budget to fund a position within the Company to perform energy audits in the MFB program, should demand for such audits exceed the Company's current capability (Tr. at 51-54). Mr. Ledgerwood stated that the FY 1994 budget also contains separate funding for an outside contractor to perform MFB audits in case the Company is unable to hire an auditor internally (id.). In response to a record request, the Company stated that rather than budgeting for two positions, it simply could transfer funding from one line-item to the other, depending on the need for an additional auditor id.). Accordingly, the Department finds that the Company's FY 1994 budget should be reduced by the \$26,240 specified for the hiring of an internal auditor.

Based on our review of the record, we find that a net operating budget of \$1,775,97½ for FY 1994 is reasonable and that the proposed surcharge of \$0.21 per customer bill is appropriate. The Department will review the actual FY 1994 expenditures in the next annual budget review.

# D. Future Proceedings

In <u>Massachusetts Electric Company</u> D.P.U. 92-78, at 19-20, 25-26, 30 (1992), the Department emphasized that in future rate cases, as an aid in determining the reasonableness of certain proposed adjustments to test year operating expenses, the

This number is derived by subtracting \$26,240 from the staff salary budget (for the MFB auditor), \$8,000 from the budget for local initiative, and \$4,500 from the budget for incentive items. In total, the Department has subtracted \$38,740 from the Company's proposed FY 1994 budget of \$1,814,712.

Department will expect all utilities, where possible, to provide comparative analyses of these adjustments to other investor-owned utilities in New England. Id. The Department recognizes the obvious differences between a rate case proceeding and an ECS budget review proceeding, and does not expect each utility or ECS service provider to conduct this level of analysis on its own accord. Nonetheless, the Department finds that the comparative analysis technique is a useful tool in determining the reasonableness of certain operating expenses.

The Department puts DOER and the investor-owned utility/other ECS service providers on notice that in future ECS proceedings the Department expect, as a means of determining the reasonableness of a given company's ECS operating expenses, to compare where possible, one company's ECS operating expenses against other companies' similar expenses. To facilitate this analysis in the fairest and most cost effective manner, the Department recommends that a cooperative dialogue be established among DOER, investor-owned utilities, MSI, and the Department.

#### VI. ORDER

Accordingly, after due notice, hearing, and consideration, it is

The Department recognizes that, for a variety of reasons, certain companies experience higher costs to serve their customers. These reasons, if explained and justified, would be taken into consideration during the Department's comparative analysis of ECS budgets.

ORDERED: That net operating expenses in the amount of \$1,635,406 are approved for Boston Edison Company for the fiscal year July 1, 1991 through June 30, 1992; and it is

FURTHER ORDERED That net operating expenses in the amount of \$1,216,718 are approved for Boston Edison Company for the first nine months of the fiscal year July 1, 1992 through June 30, 1993; and it is

FURTHER ORDERED That a net operating budget in the amount of \$1,775,972 is approved for Boston Edison Company for the fiscal year July 1, 1993 through June 30, 1994; and it is

FURTHER ORDERED That an Energy Conservation Service surcharge of \$0.21 per customer bill is approved for Boston Edison Company for the fiscal year July 1, 1993 through June 30, 1994; and it is

FURTHER ORDERED That if Boston Edison Company is overcollecting by more than ten percent by the end of the third quarter of the fiscal year, the Company must refile for an adjustment to or elimination of its surcharge.

By Order of the Department,